Unit 2 Practise Questions-Nomenclature-Chemical Names and Formulas - ROMAN NUMERALS/BINARY

1. Use proper IUPAC rules for naming the following binary ionic compounds:
2. NaCl(s)
3. CaO(s)
4. CaCl2(s)
5. KCl
6. Al2O3(s)
7. CaH(s)
8. Write the formulas for the following binary ionic compounds.
9. Silver chloride
10. Magnesium oxide
11. Sodium fluoride
12. Strontium Selenide
13. Write a chemical formula for the two elements(molecules) given. IGNORE original subscripts. Only use charges to decide upon the formula.

Ex: H2(g) S8(s) H+ S 2- now use criss crossH2S

1. Ag(s) S8(s)
2. Sr(s) O2(g)
3. Al(s) Cl2(g)
4. Ca(s) S8(s)
5. Mg(s) P4(s)
6. Write the formula for the following compounds.
7. Mercury (II)sulfide
8. Molybdenum(IV)sulphide
9. Manganese (IV)oxide
10. Nickel(II)bromide
11. Copper(II)chloride
12. Iron(III) iodide
13. Name the following compounds considering their oxidation state. Be sure to indicate this using a roman numeral on the metal ion. (Beware these are multivalent/multicharged)
14. CuS(s)
15. Cu2S(s)
16. PbS2(s)
17. Fe2O3(s)
18. NiCl2(s)
19. CuBr2(s)
20. Cr2O3(s)
21. V2O5(s)

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_HYDRATES/MOLECULAR POLYATOMICS/DIATOMICS

1. Practise with hydrates. Name the following hydrates.
2. CuSO4 ●5H2O(s)
3. Na2SO4 ●10H2O(s)
4. MgSO4 ●7H2O(s)
5. CaSO4 ●2H2O(s)
6. Fe2O3 ●3H2O(s)
7. Write formulas for the following.
8. Aluminum chloride hexahydrate
9. Sodium sulfate decahydrate
10. Lithium chloride tetrahydrate
11. Sodium thiosulfate pentahydrate
12. Sodium sulfate heptahydrate

Do you remember these MOLECULES FROM GRADE 10 ? They exist as pairs when written by themselves

Lucky “7” Diatomics N2(g) O2(g) F2(g) Cl2(g) Br2(l) I2(s) H2(g)

Here are a few more to remember some polyatomic molecules.....P4(s) S8(s) O3(g)

(these ones like to exist as a group when written by themselves.....

1. Practise with molecular equations. Write a formula equation for the following.
2. Nitrogen + oxygen 🡪 nitrogen dioxide
3. Solid silicon + fluorine gas 🡪 silicon tetrafluoride solid
4. Methane gas reacts with oxygen gas to produce liquid methanol
5. Solid boron reacts with hydrogen gas to produce gaseous diboron tetrahydride
6. Octane reacts with oxygen to produce carbon dioxide gas and carbon monoxide gas and carbon and water vapor